surfaces of the outer casing (**1**) (exclusive of edges) are perforated. The perforations on any particular surface of the outer case (**1**) or the outer case lid (**4**) may be in discrete patterns or randomly or regularly placed. A label may be added to an exterior surface of the outer case (**1**) (but preferably not the bottom) or the outer case lid (**4**), preferably each. In general there may be a portion of the outer case lid (**4**) or of one or more surfaces of the outer case (**1**) that is not perforated that allows for easy labeling and handling of a particular outer case (**1**) when closed with the outer case lid (**4**) in place. In a desirable embodiment, a portion of at least one of the outer case side walls and/or the outer case lid (**4**) is not perforated for the purpose of affixing a label thereto. This portion may be in any convenient location on the surface of such side wall and/or the outer case lid (**4**), but advantageously it is centrally located.

[**0020**] The outer case (**1**), outer case lid (**4**), and inner tray (**3**) may be of any suitable material for a sterilization container that is compatible with the sterilization mode. Thus, an outer case (**1**), outer case lid (**4**), and inner tray (**3**) that are intended for use in steam sterilization may be made of any materials that are compatible with steam sterilization and still result in a rigid container. As such, materials such as metals, plastics, composites and hybrids thereof are suitable. The outer case, outer case lid, and inner tray may be of any suitable material for a sterilization container intended for use in gas. For outer case (**1**), outer case lid (**4**), and inner tray (**3**) that are intended for use in gas plasma sterilization, these components can be fabricated from materials that are compatible with gas plasma sterilization, such as metal, anodized metal, conductive plastics, etc., composites thereof and hybrids thereof. Where gas plasma sterilization is used and the outer case lid (**4**) and outer case (**1**) are one or more of these materials, the inner tray (**3**) may also be one of these materials, but may also be constructed of other material that is not detrimental to the system as a whole. As such, in addition to metal, anodized metal, autoclavable or conductive plastics, etc., composites thereof, and hybrids thereof, the inner tray (**3**) may be made of suitable metal, plastic, hybrid or composite materials, or the like.

[**0021**] Suitable materials for the construction of the outer case (**1**), outer case lid (**4**), and inner tray (**3**) include, without limitation, metals such as stainless steel, aluminum, titanium, and magnesium, as well as alloys of any of these, plastics (which in the case of gas plasma suitable products are conductive plastics), metal filled plastics, carbon filled plastics, carbon/plastic composites and hybrids, metal/plastic composites and hybrids, and the like. Each of the metals or metal alloys may or may not have an anodic coating thereon, but preferably do have the anodic coating, especially if the metal is sensitive to the sterilant in question. A highly preferred metal is aluminum or aluminum alloy, especially aluminum alloy 0019, any of the series **2000** alloys, any of the series **5000** alloys, or any of the series **6000** alloys. A particularly suitable one of the series **5000** is **5052** and a particularly suitable one of the series **6000** is **6061**. The anodic coating, when present in devices that are used in sterilization modes other than gas plasma sterilization, may be of any desired thickness. For devices that will be used in gas plasma sterilization, the anodic thickness is preferably maintained at not greater than about 0.5 mills (0.0005 inches), more preferably not greater than about 0.4 mils (0.0004 inches), more preferably not greater than about 0.35 mils (0.00035 inches), and while any such thickness below the maximums indicated here are suitable, in highly preferred embodiments, the anodic thickness is at least about 0.05 mils (0.00005 inches), more preferably at least about 0.1 mils (0.0001 inches), even more preferably at least about 0.15 mils (0.00015 inches), still more preferably at least about 0.2 mils (0.0002 inches), and most preferably at least about 0.25 mils (0.00025 inches). When the metal used in any of the above components is aluminum or an aluminum alloy, the metal or alloy may be optionally heat treated, if desired, preferably to T4, T5, or T6, with T4 or T5 being preferably as they are easier to attain in practice. However, heat treatment of the metal is not required. Still, heat treatment is not a requirement of the invention.

[**0022**] When plastics are used for any of the outer case (**1**), the inner tray (**3**), and/or the outer case lid (**4**), the plastic is any autoclavable plastic, with polypropylene, polysulfone, and liquid crystal polymer (LCP) being preferred. When a conductive component is necessary, but the foregoing materials are not themselves conductive, such as polypropylene, etc., a composite or hydbrid material such as a metal or carbon filled plastic or a metal or carbon composite with the non-conductive material can be used. Metal or carbon that are completely or nearly completely contained within the plastic (i.e. will not be significantly exposed directly to the sterilant can be chosen from any metal or carbon source that will provide the requisite electronic conductivity, without concern for sensitivity to the sterilant). Where the metal or other material is used in a fashion that it will be exposed to the sterilant, it is preferable to utilize such materials that are resistant to corrosion by the sterilant or to apply protective layers such as anodic coatings on metals. As an alternative to this, a conductive surface may be applied in any suitable manner to a non-conductive surface. As such, an aluminum layer may be applied to a non-conductive frame in any convenient manner, such as by wrapping the surfaces with metal foil or by vapor deposition and other techniques known in the art. Once the conductive layer has been applied and the perforation made, any anodic layer that is deemed needed should then be applied so that the entire exposed conductive surface can be layered with an anodic coating. While applying the anodic coating earlier is possible, doing so allows for small segments of the conductive surface to be exposed to sterilant when in use and therefore leads to early product failure.

[**0023**] The outer case (**1**), outer case lid (**4**), and inner tray (**3**) (when constructed of metal) can be constructed from sheet metal that has been pre-perforated in the desired manner, and is then bent into shape and if desired then anodized. Anodization before perforation and bending into shape is also suitable. Conductive plastics do not require the anodization layer and may be cast directly into the shape desired.

[**0024**] The outer case (**1**) may be formed with protrusions (**7**) or indentations (not shown) that mate with indentations (**6**) or protrusions (not shown), respectively, in outer case lids (**4**) so that one outer case (**1**) is readily and stably stackable on top of the outer case lid (**4**) acting as a closure for another outer case (**1**). These protrusions and indentations are most suitably spaced so that when engaged there is a clearance space between one outer case bottom (**5**) of one unit and the outer case lid (**4**) of another unit below it. The protrusions (**7**) on the outer case bottoms (**5**) may be